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NOTICE OF ALLOWANCE AND FEE(S) DUE

23373

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04/23/2009

SUGHRUE MION, PLLC 2100 PENNSYLVANIA AVENUE, N.W. SUITE 800 WASHINGTON, DC 20037 EXAMINER
SHECHTMAN, SEAN P
ART UNIT PAPER NUMBER

2121

DATE MAILED: 04/23/2009

| APPLICATION NO. FILING DATE | | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------|------------|----------------------|---------------------|------------------|
| 10/563,220 | 01/03/2006 | Takashi Kamiya | Q91974 | 1492 |

TITLE OF INVENTION: AUTOMATIC PROGRAMMING METHOD AND AUTOMATIC PROGRAMMING DEVICE

| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DUE | PREV. PAID ISSUE FEE | TOTAL FEE(S) DUE | DATE DUE |
|----------------|--------------|---------------|---------------------|----------------------|------------------|------------|
| nonprovisional | NO | \$1510 | \$300 | \$0 | \$1810 | 07/23/2009 |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

| maintenance fee notifica | correspondence including defected of the delow or directed of the tions. ENCE ADDRESS (Note: Use Bl | • | N Fe | ote: A certificate of | mailing can only be used f | t correspondence address as varate "FEE ADDRESS" for or domestic mailings of the for any other accompanying | |
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| | pa | papers. Each additional paper, such as an assignment or formal drawing, mus have its own certificate of mailing or transmission. | | | | | |
| SUITE 800 | ION, PLLC LVANIA AVENUE | , N.W. | I S: ac tr | hereby certify that the tates Postal Service wildressed to the Mai | tificate of Mailing or Tran is Fee(s) Transmittal is beir vith sufficient postage for fi I Stop ISSUE FEE address TO (571) 273-2885, on the | g deposited with the United rst class mail in an envelope a above, or being facsimile | |
| WASHINGTON | N, DC 20037 | | | | | (Depositor's name) | |
| | | | | | | (Signature) | |
| | | | L | | | (Date) | |
| APPLICATION NO. | FILING DATE | | FIRST NAMED INVENTO | OR . | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
| 10/563,220 | 01/03/2006 | • | Takashi Kamiya | | Q91974 | 1492 | |
| | | RAMMING METHOD A | T | 1 | | | |
| APPLN. TYPE | SMALL ENTITY | ISSUE FEE DUE | PUBLICATION FEE DU | | | | |
| nonprovisional | NO | \$1510 | \$300 | \$ 0 | \$1810 | 07/23/2009 | |
| EXAM | IINER | ART UNIT | CLASS-SUBCLASS | | | | |
| SHECHTM. 1. Change of correspond | AN, SEAN P | 2121 | 700-182000 | | | | |
| CFR 1.363). Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required. 3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON PLEASE NOTE: Unless an assignee is identified below, no assignee | | | or agents OR, alterna (2) the name of a sir registered attorney o 2 registered patent a listed, no name will lead THE PATENT (print or data will appear on the | ne of a single firm (having as a member a attorney or agent) and the names of up to d patent attorneys or agents. If no name is ame will be printed. | | | |
| (A) NAME OF ASSI | GNEE | pletion of this form is NO | (B) RESIDENCE: (CI | ΓΥ and STATE OR C | , | roup entity 🚨 Government | |
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| ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies | | | A check is enclosed. | | | | |
| | | | ☐ Payment by credit card. Form PTO-2038 is attached. ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form). | | | | |
| 5. Change in Entity Sta | ntus (from status indicate ns SMALL ENTITY state | , | ☐ b. Applicant is no le | onger claiming SMA | LL ENTITY status. See 37 (| CFR 1.27(g)(2). | |
| NOTE: The Issue Fee an interest as shown by the | nd Publication Fee (if req records of the United Sta | uired) will not be accepte tes Patent and Trademark | ed from anyone other that c Office. | n the applicant; a regi | istered attorney or agent; or t | he assignee or other party in | |
| Authorized Signature | | | | Date | | | |
| Typed or printed name | | | | _ | No | | |
| This collection of inform an application. Confiden submitting the complete this form and/or suggest Box 1450, Alexandria, V Alexandria, Virginia 223 | itiality is governed by 35 dapplication form to the ions for reducing this bu /irginia 22313-1450. DC | CFR 1.311. The informatic JU.S.C. 122 and 37 CFR E USPTO. Time will vary rden, should be sent to the D NOT SEND FEES OR | on is required to obtain c 1.14. This collection is 7 depending upon the inc the Chief Information Off COMPLETED FORMS | or retain a benefit by the estimated to take 12 stividual case. Any color, U.S. Patent and TO THIS ADDRESS | he public which is to file (ar minutes to complete, includi mments on the amount of t Trademark Office, U.S. Dep S. SEND TO: Commissioner | nd by the USPTO to process) ng gathering, preparing, and ime you require to complete partment of Commerce, P.O. for Patents, P.O. Box 1450, | |

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

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| 10/563,220 01/03/2006 | | Takashi Kamiya | Q91974 | 1492 |
| 23373 75 | 590 04/23/2009 | | EXAM | INER |
| SUGHRUE MIO | N, PLLC | SHECHTMA | AN, SEAN P | |
| | ANIA AVENUE, N.W | ART UNIT | PAPER NUMBER | |
| SUITE 800 WASHINGTON, I | DC 20037 | | 2121 DATE MAILED: 04/23/200 | 9 |

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

| | Application No. | Applicant(s) | | |
|---|--|---|-----------------|--|
| | 10/563,220 | KAMIYA ET AL. | | |
| Notice of Allowability | Examiner | Art Unit | | |
| | Sean P. Shechtman | 2121 | | |
| The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313 1. This communication is responsive to 1/22/09. | (OR REMAINS) CLOSED in or other appropriate communication is supplication is supplication. | n this application. If not included unication will be mailed in due cours | se. THIS | |
| 2. ☑ The allowed claim(s) is/are <u>10-12,16-18,20 and 21</u> . | | | | |
| Acknowledgment is made of a claim for foreign priority ur a) | been received. been received in Application | on No d in this national stage application f | | |
| noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give | IENT of this application. itted. Note the attached EXA | AMINER'S AMENDMENT or NOTIC | | |
| 5. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. | | | | |
| Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material | 6. ☐ Interview S Paper No./ 7. ☐ Examiner's — | formal Patent Application ummary (PTO-413), Mail Date Amendment/Comment Statement of Reasons for Allowand | ce | |

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DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Richard C. Turner on 3/13/09.

The application has been amended as follows:

The claims have been amended as follows:

Referring to claim 10, line 17,

-- a machining unit that corresponds to the one of the machining unit names -- has been inserted, replacing "the specified machining unit".

Referring to claim 16, line 13,

-- a machining unit that corresponds to the one of the machining unit names -- has been inserted, replacing "the specified machining unit".

Referring to claim 21, line 4,

-- substantially the same -- has been inserted, replacing "substantially same".

Claims 13, 14, 15, 19, 22, 23, have been cancelled.

Claim Objections

2. Objections withdrawn.

Claim Rejections - 35 USC § 112

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3. Rejections withdrawn.

Claim Rejections - 35 USC § 103

4. Rejections withdrawn.

Allowable Subject Matter

5. Claims 10-12,16-18,20 and 21 are allowed.

The following is an examiner's statement of reasons for allowance:

While, Bhargava teaches a method, system and computer-readable recording medium that stores therein a computer program for plurality of machining units (Col. 6, lines 49-62; Figs. 4A, 4B, cut, drill), by using a program editing screen including

a machining shape tree on which a plurality of machining unit names indicating a machining shape of the machining unit, as a unit of machining in which continuous machining is performed with the same main spindle and with the same tool, is displayed hierarchically according to a machining order; (Figs. 4A, 4B; Col. 7, lines 11-45, graphical browser portion 64 and 64'),

a model display section in which a product model (Fig. 14; Col. 10, lines 35-45), a work model (Figs. 4A, 4B, Col. 7, lines 11-45, modeling portion 62 and 62') and a machining shape model corresponding to the specified machining unit (Fig. 13, Col. 10, lines 12-34) are displayed three-dimensionally,

an editor section in which machining unit data corresponding to the machining unit name specified on the machining shape tree is displayed to perform editing (Fig. 10, element 96; Col. 9, lines 44-55), the computer program causing the computer to execute:

Art Unit: 2121

displaying a machining unit corresponding to a cursor position in the editor section (Fig. 10, Rear Cut; Col. 9, lines 44-55) and in any one of the product model and the work model or both displayed in the model display section in a highlighted manner (Fig. 10, Rear Cut in element 64 is highlighted therefore highlighting the rear cut of element 62, see Col. 9, lines 44-55; Col. 8, lines 33-44; Col. 8, lines 13-32);

Page 4

inserting machining shape information corresponding to a specified shape element required for forming the machining unit data with respect to the machining shape model displayed in the model display section in a cursor position specified in the editor section (Fig. 10, element 96, Rear Cut; Col. 9, lines 44-55; and/or Fig. 12, fillet features); wherein the inserting includes inserting machining unit data corresponding to the machining unit relating to the machining shape model specified in the model display section at the cursor position (Fig. 10, element 96, Rear Cut; Col. 9, lines 44-55).

And, Guenther teaches automatic programming for an NC creation program including a plurality of machining units and a machining program for each machining unit, and a program tree on which a plurality of machining program names relating to the respective machining units is displayed hierarchically according to the machining order (Fig. 1, element 1; Col. 4, lines 32-43; Fig. 3, Col. 5, lines 36-52).

And, Ragnini teaches an NC creation program-editing function for editing an NC creation program (Page 2, paragraph 27-28, 34; Page 3, paragraph 34). Referring to claims 10-12, 16-18, Ragnini teaches a machining program corresponding to a machining program name specified on a directory are displayed to perform editing (Pages 2-3, paragraph 33-34; Page 3, paragraph 43; Page 2, paragraph 27-28).

Referring to claims 21, 23, Ragnini teaches an NC creation program-editing function for editing an NC creation program, comprises inserting a name (Fig. 3, Page 2, paragraphs 27-28, CNC name) and corresponding machine code for a corresponding machining unit (Pages 2-3, paragraph 34, editing G-code programs associated with a CNC machine).

Referring to claims 10, 16, none of Bhargava, Guenther or Ragnini, taken either alone or in obvious combination disclose an automatic programming method and device having all the claimed features of applicant's instant invention, specifically including: automatically inserting machine shape information, wherein the inserted machining shape information indicates the machining shape of the machining unit that machines the work model into the product model and a machining area of the machining unit specified in the machining program.

It is for these reasons that applicant's invention defines over the prior art of record. Claims 11-12, 17-18, 20-21 depend from claims 10 or 16 and are therefore also allowable. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571)272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SPS Sean P. Shechtman April 10, 2009

/Sean P. Shechtman/ Primary Examiner, Art Unit 2121